

REMARKS

This application has been reviewed in light of the Office Action dated August 20, 2009. Claims 1-4, 6-9, 19-22, 24-27 and 33 are presented for examination, of which Claims 1, 19 and 33 are in independent form. Claims 10-12, 28-30 and 34 have been canceled without disclaimer and prejudice of subject matter, and will not be discussed further. Claims 1-4, 7, 8, 19-22, 25, 26 and 33 have been amended to define still more clearly what Applicant regards as his invention. Favorable reconsideration is respectfully requested.

In the outstanding Office Action, Claims 1-4, 6-8, 19-22, 24-26 and 33 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 6,466,329 (Mukai) in view of U.S. Patent Application Publication 2002/0170973 (Teraura).

Applicant submits that that the independent claims, together with their dependent claims, are patentable over the cited prior art for at least the following reasons.

As discussed in the specification, a major concern with conventional copying, where a piece of paper with an image on it is scanned and the scanned image is printed on another piece of paper, is the deterioration of image quality (para. [0005]).

According to certain aspects of the present invention, a piece of paper where an image is printed can be used to identify a digital version of the image, which is then directly sent to the printer (Abstract). Specifically, each piece of paper has a radio frequency identification (RFID) chip, which contains ID information which identifies the RFID and thus the piece of paper (para. [0029]). After an image is printed on a first piece of paper, the ID information contained in the RFID chip of the first piece of paper and the digital version of the image are stored together in a central database (para. [0035]).

When the image needs to be copied, the first piece of paper can be presented, and the RFID chip of the first piece of paper can be easily scanned (para. [0037]). The ID information contained in the RFID chip is then used to retrieve from the database the associated digital version of the image, which is then sent to the printer where the image is printed on a second piece of paper (para. [0038]). The ID information contained in the RFID chip of the second piece of paper is then also stored in the central database as being associated with the digital version of the image (para. [0040]). After that, when the image needs to be copied again, the second piece of paper can be used in the same way as the first piece of paper to retrieve from the database the digital version of the image and have the image directly printed on additional pieces of paper.¹

In this way, copying involves merely a quick radio-frequency scan of the RFID attached to a piece of paper where an image is already printed, rather than a relatively lengthy physical scan of the entire piece of paper. In addition, the quality of additional copies of the image on paper may be maintained.

Claim 1 recites, among other features, “image forming means that, in accordance with an image forming instruction, forms an image relating to subject data on a recording medium provided thereon with an RFID tag that stores identification information specific to the recording medium; ... database means that, in accordance with the image forming instruction, obtains the identification information read by said detecting means from the RFID tag of the recording medium and forms a database of the subject data along with the obtained identification information.”

¹ It is to be understood that the scope of the claims is not limited by the details of this or any other embodiment that may be referred to.

These features are not believed to be disclosed or suggested in *Mukai* and *Teraura*, considered separately or in any permissible combination.

As Applicant understands, *Mukai* relates to a reproduction system where print data for an image is received page by page and multiple copies of each page of the image can be made without degradation of image quality (*see* col. 3, lines 16-21). Specifically, each page of the image is assigned an ID (*see* col. 4, lines 64-67 and col. 11, lines 61-63). The ID is then stored along with the print data for the page of the image in a database (*see* col. 11, lines 63-66). When the print data for the page of image is developed and the page of image is printed on a first piece of paper, the ID is also printed on the first piece of paper (*see* col. 11, line 64-col. 12, line 4).

When the page of image needs to be copied, the first piece of paper can be presented and scanned, and the ID can be detected as a result of scanning of the entire piece of paper (*see* col. 13, lines 1-3). The ID is then used to retrieve from the database the print data for the page of image, which is then developed and sent to the printer where the page of image is printed on a second piece of paper (*see* col. 13, lines 38-44).

In this way, copying still involves a relatively lengthy physical scan of the entire piece of paper, even if the quality of additional copies of the image on paper might be maintained.

Since each ID in *Mukai* identifies a page of an image (through the corresponding print data) to be printed rather than a piece of paper on which an image is printed, *Mukai* does not disclose “image forming means that... forms an image relating to subject data on a recording medium provided thereon with an... tag that stores *identification information specific to the recording medium* [emphasis added],” as recited

in Claim 1. Certainly, it also does not teach the database means of Claim 1, which relies on the image forming means.

Teraura is not believed to remedy the deficiency discussed above. As Applicant also understands, *Teraura* relates to a system which relies on RFID chips to control copying and similar operations (*see* Abstract). Specifically, each piece of paper has an RFID chip, which contains permission information to control whether/how the piece of paper can undergo a copy operation, for example. When an image printed on a piece of paper is to be copied, the piece of paper can be presented and scanned, and the RFID chip of the piece of paper can also be scanned (*see* para. [0087]). The permission information contained in the RFID chip is then used to determine whether the presenter of the piece of paper is authorized to perform the copy operation (*see* para. [0089]). If the determination is positive, the scanned image is printed on another sheet of paper (*see* para. [0090] and [0091]).

Apparently, then, the information contained in an RFID chip on a piece of paper is not used to identify the image printed on the piece of paper and specifically a digital version of the image. It is thus not necessary to save the information along with any digital version in a database so that the digital version can be retrieved from the database at a later point using the information as an index. Therefore, *Teraura* also does not disclose or suggest “database means that... obtains the identification information read by said detecting means from the RFID tag of the recording medium and forms a database from the subject data along with the obtained identification information,” as recited in Claim 1.

Accordingly, for at least the reasons noted above, Claim 1 is believed patentable over *Mukai* and *Teraura*, considered separately or in any permissible combination.

Independent Claims 19 and 33 recite features similar to those discussed above with respect to Claim 1 and, therefore, are also believed to be patentable over *Mukai* and *Teraura* for the reasons discussed above.

A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and allowance of the present application.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

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